Listing of Claims

The listing of claims that follows includes the present status of all claims including current amendments and will replace all prior versions and listings of claims in the application:

1-36(canceled).

37(new). A method for screening for compounds for treating hepatitis C virus (HCV) infection comprising steps of:

(a) assessing the effect of a test compound on the activity of 2'-5'-oligoadenylate synthetase (OAS), wherein said test compound is one other than a compound selected from the group consisting of interferons and isoprenoids including geranylgeranylacetone (GGA);

38(new). A method as defined in claim 37 including the step of:

(b) treating a cell with said test compound; and

(c) assessing any change in OAS gene activity and/or OAS protein activity or level.

39(new). A method as defined in claim 38 wherein the cell is an animal cell.

40(new). A method as defined in claim 38 wherein the cell is a human cell.

41(new). A method as defined in claim 38 including the step of using a compound capable of modulating the level of activity

of the OAS gene and/or activity of the OAS protein identified in claim 38 in the manufacture of a medicament for the treatment of a patient with or at risk of HCV infection.

42(new). A compound capable of modulating the level of activity of an entity selected from the group consisting of the OAS gene, the OAS protein and combinations thereof identified or identifiable from the method of claim 37.

43(new). A method of screening for compounds for treating HCV infection including the step of:

(a) assessing the effect of a test compound on the activity of RNAse L wherein said test compound is one other than a compound selected from the group consisting of interferons and isoprenoids, including geranylgeranylacetone (GGA).

44(new). A method as defined in claim 43 including the steps of:

(b) treating a cell with a test compound; and

(c) assessing any change in RNAse L gene activity and/or RNAse L protein activity or level.

45(new). A method as defined in claim 44 wherein the cell is an animal cell.

46(new). A method as defined in claim 44 wherein the cell is a human cell.

47(new). A method as defined in claim 44 including the step of using a compound identified in claim 44 in the manufacture of

a medicament for the treatment of a patient with or at risk of HCV infection.

48(new). A compound capable of modulating the level of activity of an entity selected from the group consisting of the RNAse L gene, the RNAse L protein and combinations thereof as identified or identifiable from the method of claim 43.

49(new). A method of screening for compounds for treating HCV infection including the step of:

(a) assessing the effect of a test compound on the activity of 2'-5' phosphodiesterase wherein said test compound is one other than a compound selected from the group consisting of interferons and isoprenoids, including geranylgeranylacetone (GGA).

50(new). A method as defined in claim 49 including the steps of:

(b) treating a cell with a test compound; and

(c) assessing any change in the 2'-5' phosphodiesterase gene activity and/or 2'-5' phosphodiesterase protein activity or level.

51(new). A method as defined in claim 50 wherein the cell is an animal cell.

52(new). A method as defined in claim 50 wherein the cell is a human cell.

53(new). A method as defined in claim 50 including the further step of using a compound identified in claim 50 in the

manufacture of a medicament for the treatment of a patient with or at risk of HCV infection.

54(new). A compound capable of modulating the level of activity of an entity selected from the group consisting of the 2'-5' phosphodiesterase gene, activity of the 2'-5' phosphodiesterase protein, or a combination thereof as identified or identifiable from the method of claim 49.

55(new). A method for the manufacture of a product selected from the group consisting of a medicament for the treatment of a patient with or at risk of HCV infection and a diagnostic reagent for use in the assessment or diagnosis of a patient with or at risk of HCV infection including a step using a nucleic acid which hybridizes selectively to an OAS nucleic acid.

56(new). A method as defined in claim 55 wherein the nucleic acid comprises the polynucleotide sequence shown in figure 1 or a fraction thereof wherein the nucleotide sequence at position 84bp into the untranslated 3' end of exon 8 is A.

57(new). A method as defined in claim 55 wherein the nucleic acid comprises the polynucleotide sequence shown in figure 1 or a fraction thereof wherein the nucleotide sequence at position 84bp into the untranslated 3' end of exon 8 is G.

58(new). A method of determining whether a patient with or at risk of HCV infection has an OAS1 gene in which the nucleotide sequence at position 84bp into the untranslated 3' end of exon 8 is G, wherein the method comprises a step of determining the OAS1

genotype of said patient.

59(new). A method as defined in claim 58 comprising a step of performing an allele specific PCR reaction using polynucleotides comprising the DNA sequences:

- (1) CTCACTGAGGAGCTTTGTCT

(2) CACTGAGGAGCTTTGTCC

and/or (3) CAGGTGGGACTCTTGATCCAG.

60(new). A method as defined in claim 58 comprising the further step of determining the relative prospects of recovery from infection and/or success of treatment with interferon of a patient with or at risk of HCV infection based on said determination of the OAS genotype of the patient.

61(new). A method as defined in claim 59 comprising the further step of determining the relative prospects of recovery from infection and/or success of treatment with interferon of a patient with or at risk of HCV infection based on said determination of the OAS genotype of the patient.

62(new). A method as defined in claim 60 including the step of selecting a method of treatment of a patient with or at risk of HCV infection.

63(new). A method as defined in claim 61 including the step of selecting a method of treatment of a patient with or at risk of HCV infection.

64(new). A pharmaceutical composition comprising:

(a) a compound, polynucleotide or polypeptide comprising a

compound selected from the group consisting of compounds that are capable of modulating the level of activity of the OAS1 gene and/or activity of the OAS1 protein, compounds that are capable of modulating the level of activity of the RNAse L gene and/or activity of the RNAse L protein, compounds that are capable of modulating the level of activity of the 2'-5' phosphodiesterase gene, and/or activity of the 2'-5' phosphodiesterase protein and/or a recombinant polynucleotide which hybridizes selectively to an OAS nucleic acid;

(b) a therapeutically appropriate quantity of an interferon; and

(c) a pharmaceutically acceptable diluent or carrier.